AMENDMENTS TO THE CLAIMS

1 (Currently Amended) A probe for the quantitative measurement of the feel of a surface ~~(20)~~, comprising:

- a prehensile casing ~~(1)~~;
- a hollow contacting body ~~(6)~~ intended to be brought into contact with said surface in a probed region;
- acoustic first detection elements ~~(5)~~ for detecting noise emitted by ~~the~~ said hollow body while it is in contact with said probed region; and
- mechanical second detection elements ~~(4, 7, 8)~~ designed to measure ~~the~~ either normal force or pressure and ~~the~~ friction force that are exerted by said surface on said hollow body.

2. (Currently Amended) The probe as claimed in claim 1, ~~in which~~ wherein ~~the~~ said acoustic first detection elements comprise a microphone held inside said prehensile casing, ~~this~~ said microphone comprising a membrane ~~(11)~~ located inside said hollow body.

3. (Currently Amended) The probe as claimed in ~~either of the preceding claims~~, claim 1, ~~in which~~ wherein ~~the~~ said mechanical second detection elements comprise at least one normal force sensor ~~(4)~~ designed to measure the normal force experienced by said hollow body while it is in contact with ~~the~~ said probed region.

4. (Currently Amended) The probe as claimed in ~~either of claims 1 and 2~~, claims 1, ~~in which~~ wherein ~~the~~ said mechanical second detection elements comprise at least one normal pressure sensor designed to measure the normal pressure experienced by said hollow body while it is in contact with ~~the~~ said probed region.

5. (Currently Amended) The probe as claimed in ~~one of the preceding~~ ~~claims~~ claim 1, ~~in which~~ wherein ~~the~~ said mechanical second detection elements comprise at least one friction force sensor ~~(7, 8)~~ designed to measure ~~the~~ friction force experienced by said hollow body while it is in contact with ~~the~~ said probed region.

6 (Currently Amended) The probe as claimed in ~~one of the preceding~~ ~~claims~~ claim 1, which includes an elongate component ~~(3)~~ extending between two ends, which component is held inside ~~the~~ said prehensile casing and is connected at one of its ends to said hollow body, said component being designed to transmit the normal and friction forces to ~~the~~ said second detection elements.

7. (Currently Amended) The probe as claimed in ~~the preceding claim~~ claim 6, ~~in which~~ wherein ~~the~~ said friction force sensor comprises an accelerometer ~~(7)~~ and strain gauges ~~(8)~~ that are attached to said elongate component.

8. (Currently Amended) The probe as claimed in ~~the preceding claim~~ claim 7, ~~in which~~ wherein said elongate component includes two lateral openings ~~(35)~~ so as to form two plates (36) on either side of said elongate component, said plates bearing said strain gauges.

9. (Currently Amended) The probe as claimed in ~~the preceding claim~~, claim 8 ~~in which~~ wherein said elongate component is formed from a metal alloy.

10 (Currently Amended) The probe as claimed in ~~one of the preceding~~ ~~claims~~ claim 1, which comprises a diode ~~(9)~~ placed on ~~the~~ said prehensile casing and intended to indicate the direction of movement of said probe while it is in contact with ~~the~~ said probed region.

11. (Currently Amended) The probe as claimed in claim 10 ~~in the preceding claim~~, ~~in which~~ wherein ~~the~~ said diode is linked to an optical camera in order to

form a device for measuring ~~the~~ speed of movement of ~~the~~ said hollow body over ~~the~~ said probed region.

12. (Currently Amended) The probe as claimed in ~~one of the preceding~~ ~~claims~~ claim 1, ~~in which~~ wherein ~~the~~ said hollow body has a spherical shape.

13 (Currently Amended) The probe as claimed in ~~one of claims 1 to 11~~, claim 1, ~~in which~~ wherein ~~the~~ said hollow body comprises a plane upper surface ~~(6a)~~ and a lower part consisting of a cylinder portion ~~(6b)~~.

14. (Currently Amended) The probe as claimed in ~~one of the claims 1 to 11~~ claim 1, ~~in which~~ wherein ~~the~~ said hollow body comprises an upper surface ~~(6a)~~ and a lower surface ~~(6b)~~ that are plane and approximately parallel, said hollow body having ~~the~~ a shape of a parallelepiped.

15. (Currently Amended) The probe as claimed in ~~one of the preceding~~ ~~claims~~ claim 1, ~~in which~~ wherein ~~the~~ said hollow body is made of carbon fiber

16. (Currently Amended) The probe as claimed in ~~one of the preceding~~ ~~claims~~ claim 1, which includes transmission elements ~~(12)~~ for transmitting data from ~~the~~ said first and second detection elements, and also from ~~the~~ a speed measurement device, to an electronic computing unit ~~(30)~~.

17. (Currently Amended) The probe as claimed in the preceding claim, ~~in which~~ wherein ~~the~~ said electronic computing unit is designed to convert said data into simple quantities for quantifying the feel of said probed region

18. (Currently Amended) The probe as claimed in the preceding claim, ~~in which (8)~~ wherein a gap is provided between said hollow body and said prehensile casing so as to allow normal and tangential movements of said hollow body.

19 (Currently Amended) The use of the probe as claimed in claim 1 for measuring the impact on the triboacoustic properties of a treatment applied to ~~the~~ said probed surface.